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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,610	09/30/2003		Hiroshi Minami	SNY-042 2560	
20374	7590	04/11/2006		EXAMINER	
KUBOVCII SUITE 710	K & KUI	BOVCIK	WEINER, LAURA S		
	900 17TH STREET NW				PAPER NUMBER
WASHINGT	ON, DC	20006	1745		

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summany	10/673,610	MINAMI ET AL.					
Office Action Summary	Examiner	Art Unit					
7	Laura S. Weiner	1745					
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 66(a). In no event, however, may a reply be tim fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. sely filed the mailing date of this communication. O (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 17 Fe	ebruary 2006.	•					
3) Since this application is in condition for allowan	·						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.					
Disposition of Claims							
4) Claim(s) 1-19 is/are pending in the application.		•					
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>17-19</u> is/are allowed.							
6)⊠ Claim(s) <u>1-5,7,8 and 16</u> is/are rejected.	☑ Claim(s) <u>1-5,7,8 and 16</u> is/are rejected.						
7) Claim(s) <u>6 and 9-15</u> is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9)☐ The specification is objected to by the Examine	r.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correcti		,					
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119	·						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
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Attachment(s)	<b>∧</b> □	· · · · · · · · · · · · · · · · · · ·					
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	(PTO-413) te					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal P	atent Application (PTO-152)					
Paper No(s)/Mail Date	6)						

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### **DETAILED ACTION**

# Response to Arguments

- 1. Applicant's arguments and partial translation filed 2-17-06 have been fully considered but they are not persuasive. Applicant argues that there are cracks formed in the active layer by occlusion and releasing of lithium where the cracks of the active material layer is filled with the nonaqueous electrolyte in the form of a solid electrolyte and that Okada does not teach cracks but instead teaches pores or gaps or holes so the invention is different. This is a product by process limitation because once the cracks, pores, gaps or holes are filled with the solid electrolyte the end result is an active material layer containing/filled with the nonaqueous electrolyte. Therefore the rejection of claims 1-5, 7-8, 16, 18 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okada (JP 10-247520, translation) remains.
- 2. The rejection of claims 17 and 19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn. The objection of claim 18 under 37 CFR 1.75 as being a substantial duplicate of claim 1 has been withdrawn due to the amendment to the claim. The rejection of claims 1-16, 18 under 35 U.S.C. 103(a) as being unpatentable over Fukui et al. (US 2005/0244711) in combination with Okada (JP 10-247520, translation) has been withdrawn.

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# Claim Rejections - 35 USC § 102 Claim Rejections - 35 USC § 103

3. Claims 1-5, 7-8, 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okada (JP 10-247520, translation).

Okada teaches [0014], a high polymer electrolyte is provided in a hole of the surface of an electrode. Okada teaches in [0019], that the negative electrode paste comprising graphite, PVDF and NMP was applied to a copper foil. Okada teaches in [0022], that EC and DEC are mixed with LiPF4 and the added electrolytic solution was added and the porosity PVDF with which the negative electrode is equipped was made to swell with the electrolytic solution and was used as the porous polyelectrolyte. Okada teaches in [0033], that although the copolymer of a polyacrylonitrile, a polyvinyl chloride and vinylidene fluoride and hexafluoropropylene was used besides this although PVDF was used as a giant molecule of an organic polyelectrolyte but PVDF itself can be used. Okada teaches in [0034], that although PVDF is used as a giant molecule of an organic polyelectrolyte in the example, polyethers can also be used.

In the event any differences can be shown for the product of the product by process claims 1, 8 and 15, as opposed to the product taught by Okada, such differences would have been obvious to one of ordinary skill in the art as a routine

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modification of the product in the absence of a showing of unexpected results. *In re Thrope 227 USPQ 964; (Fed. Cir. 1985).* 

With respect to the product by process claims 1, 8 and 15, the determination of patentability is based upon the product itself not upon the method of its production. *In re Thrope 227 USPQ 964; In re Brown 173 USPQ 685; In re Bridgeford 149 USPQ 55; In re Wertheim 191 USPQ 90.* Any difference imparted by the product by process limitations would have been obvious to one having ordinary skill in the art at the time the invention was made because where the Examiner has found a substantially similar product as in the applied prior art, the burden of proof is shifted to the Applicants to establish that their product is patentably distinct. *In re Brown 173 USPQ 685 and In re Fessmann 180 USPQ 324.* 

## Allowable Subject Matter

- 4. Claims 17-19 are allowed.
- 5. Claims 6, 9-15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura S. Weiner whose telephone number is 571-272-1294. The examiner can normally be reached on M-F (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura S Weiner
Primary Examiner
Art Unit 1745

April 6, 2006